

ER70S3

Specifications / Certifications:

AWS A5.18
ASME SFA A5.18
CWB Approved



Features

- Reduced Flaking and Weld Performance
- Increased Consistency in Weld Performance
- High Grade Steel is Used to Optimize Consistency

Applications

- Single and multi-pass weldments
- Pipe Welding
- Structural Steel
- Steel Buildings
- Robotic Welding
- Mechanized and Semi-Automatic Welding
- Earthmoving and Farm Equipment
- Auto Frames
- Sheet Metal
- Ships
- Barges
- Railcars
- Trailers
- Ornamental Iron

Technical Specifications

Recommended GMAW Weld Parameters:

DCEP Short Circuit					
Diameter	Volts	Amps	Wire Speed (ipm)	Travel Speed (ipm)	CO ₂ (cfh)
0.030	15-20	40-130	110-340	12-24	20-25
0.035	16-25	60-235	100-520	11-40	20-30
0.045	18-23	90-290	70-270	12-22	25-35
DCEP Spray					
Diameter	Volts	Amps	Wire Speed (ipm)	Travel Speed (ipm)	98% AR / 202
0.035	23-26	160-300	320-600	11-22	25-35
0.045	23-29	170-375	170-550	12-21	25-35
1/16	25-31	275-475	175-350	9-19	25-35

Recommended GMAW Weld Parameters:

DCEN with Truncated Conical Tip				
Diameter	Volts	Amps	Gas Cup Size	Argon (cfh)
1/16	12	100-160	3/8"	20
1/16-3/32	12	120-250	3/8"	20
1/8	12	150-300	1/2"	25

Typical Chemical Composition:

Chemical	C	Mn	Si	P	S
	0.06-0.15	0.90-1.40	0.45-0.75	0.025 max	0.035 max

Chemical Copper Contents and Coatings

	0.5 max
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Typical Mechanical Properties:

Tensile Strength (psi)	Yield Strength (psi)	Elongation
70,000 min psi	58,000 min psi	22% min

Diameters & Packages

Diameter		Lbs	Pkg
0.03"	1/32"	2	Spool
0.035"	7/200"	10	Box
		11	Spool
		33	Spool
		550	Drum
0.045"	3/64"	10	Box
		33	Spool
		550	Drum
		1000	Drum
0.052"	1/20"	550	Drum
		1000	Drum
0.062	1/16"	10	Box
0.093	3/32"	10	Box
0.125	1/8"	10	Box
0.156	5/32"	10	Box